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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/751,720	12/29/2000	John S. Rhoades	99-039-TAP	9219	
75	90 08/15/2005		EXAM	INER	
Wayne P. Bailey			COLIN, CARL G		
Storage Techno	logy Corporation				
One StorageTek Drive			ART UNIT	PAPER NUMBER	
Louisville, CO	80028-4309		2136		
	•		DATE MAIL ED: 09/15/2004	•	

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.	Applicant(s)		
09/751,720	RHOADES, JOHN S.		
Examiner	Art Unit		
Carl Colin	2136		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply** 

### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any

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earned patent term adjustment. See 37 CFR 1.704(b).  Status					
1) Responsive to communication(s) filed on <u>5/23/2005</u> .					
2a) This action is <b>FINAL</b> . 2b) This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.	j.				
Disposition of Claims					
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-30</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) ☐ The specification is objected to by the Examiner.					
10) $\boxtimes$ The drawing(s) filed on <u>29 <i>December 2000</i></u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.	1. Certified copies of the priority documents have been received.				
2. Certified copies of the priority documents have been received in Application No	2. Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application	n).				
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  4) Interview Summary (PTO-413) Paper No(s)  5) Notice of Informal Patent Application (PTO-152) 6) Other:					

### **DETAILED ACTION**

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#### Response to Arguments

1. In view of the Appeal Brief filed on 5/23/2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
  - (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

- 2. In response to communications filed on 5/23/2005, the following claims 1-30 are presented for examination.
- 2.1 Applicant's arguments in the brief, filed on 5/23/2005 with respect to the rejection of claims 1-30 have been fully considered but they are moot in view of the new ground(s) of rejection. Upon further consideration a new ground of rejection is made.

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### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3.1 Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Publication US 2004/0073676 to Honma et al in view of US Patent 4,864,438 to Munro.
- 3.2 As per claims 1, 14, and 27, Munro substantially discloses a method for sharing multiple gateway automated data storage system comprising a first automated data storage system wherein the first automated data storage system comprises a robotic mechanism for transporting data storage units and a second automated data storage system for the second data storage unit wherein the second automated data storage system comprises a second robotic mechanism for transporting data storage units (column 2, line 64 through column 3, line 26); receiving a request from a host computer for the tape cartridge and transporting the second automated data storage unit to the second data storage system without human handling of the second data storage unit (column 6, line 12 through column 7, line 12). Munro does not

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explicitly disclose creating a copy of the tape cartridge before transporting to the second second automated data storage system. Making a backup of a the tape before transfer is very well known in the art and would have been obvious to one skilled in the art of storage management in order to have a backup of the data in case of any failure or unauthorized access. Honma et al in an analogous art discloses a method and system in a secure gateway for sharing a multiple gateway automated data storage system containing a first data storage unit with data stored within the first data storage unit, comprising the steps of: creating a copy of data from a first volume to a second volume and to a tape unit within a first automated storage system (page 3, paragraph 48) that meets the recitation of transmitting the data from the first data storage unit within a first automated data storage system to a second data storage unit, wherein the first automated data storage system comprises a robotic mechanism for transporting data storage units; a request for backup is made by another server and the tape is mounted onto a tape library (page 5, paragraphs 61-62) that meets the recitation of receiving a request from a second automated data storage system for the second data storage unit wherein the second automated data storage system comprises a second robotic mechanism for transporting data storage units. Honma et al discloses several advantages with respect to backup tape for data protection (see page 3, paragraphs 41-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Munro to implement the concept of storage management of of Honma et al, creating a copy of the data within the first automated data storage system and providing a backup copy tape to the second automated data storage system because it provides a measure against disk drive failures and improvement in system availability such as disaster recovery and management of shared resources and non-disruptive

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backup (page 3, paragraphs 41-45). The motivation to do so is given by **Honma et al** who teaches tape unit shared backup as a measure against disk drive failures and improvement in system availability such as disaster recovery and management of shared resources and non-disruptive backup (page 3, paragraphs 41-45).

As per claims 2, 15, and 28, Munro discloses the limitation of further comprising: generating an identification qualifier for the second data storage unit, for example (see column 2, lines 25-46 and column 5, lines 21-40).

As per claims 3 and 16, Munro discloses the limitation of wherein the first automated data storage system is a source automated data storage system, for example (see column 2, lines 25-35 and column 2, line 64 through column 3, line 26). See also column 5, line 40 through column 7, line 11).

As per claims 4 and 17, Munro discloses the limitation of wherein the source data storage system is an unclassified data storage system, for example (column 2, line 64 through column 3, line 26 and column 5, line 40 through column 7, line 11).

As per claims 5 and 18, Munro discloses the limitation of wherein the second data storage system is a destination automated data storage system, for example, (see column 5, line 40 through column 7, line 11).

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As per claims 7, 20, and 29, Munro discloses the limitation of further comprising: responsive to the transporting step, updating a control data set managed by an automated library data storage system library server, for example (see column 15, lines 30-38 and column 12, lines 41 through column 13, line 45).

As per claims 8 and 21, Munro discloses the limitation of wherein the control data set is integrated into the automated data storage system library server, for example (see column 5, lines 15-45).

As per claims 9 and 22, Munro discloses the limitation of wherein the control data set is external to the automated data storage system library server, for example (see column 5, lines 25-38).

As per claims 10-11 and 23-24, Munro discloses the limitation of decataloging and cataloging the second data storage unit from and into the first automated data storage system and notifying the automated library server that the second data storage unit is removed from the first and received at the second automated data storage system, for example (see column 15, lines 10-50 and column 18, lines 45-67; see also columns 13-14).

As per claims 12 and 25, Munro discloses the limitation of wherein transporting the second data storage unit to the second data storage system comprises: controlling movement of the robotic mechanism to transport the second data storage unit to a pass-thru port that

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interconnects the first automated data storage system with the second automated data storage system, for example (see column 13).

As per claims 13 and 26, Munro discloses the limitation of wherein transporting the second data storage unit to the second data storage system further comprises controlling movement of the second robotic mechanism to transport the second data storage unit from the pass-thru port to the second automated data storage system, for example (see column 13).

As per claims 6, 19, and 30, Munro substantially teaches a system that controls the sharing and transfer of storage units between a first and second automated data storage systems. Munro does not explicitly state using one non-secured data storage system and a secured data storage system. US Patent 6,425,059 to Basham et al teaches a controller that prevents unloading a catridge from a drive unless the host has access rights to it (see abstract and columns 4-5). Honma et al in an analogous art teaches classified and unclassified data storage systems in an enterprise environment and further discloses that even though the sharing reduces cost but considerations should be taken in securing storage units so that all servers cannot access all storage units; for instance, a particular server can be assigned to a storage system so that only a registered server can gain access to it, (see pages 9-10, paragraphs 0103-0106). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Munro to provide classified and unclassified data storage systems and preventing transfer of data from a secure storage to a non-secure storage because some companies may have data that they do not want to share in some cases and access limitation is

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one of the ways in preventing sharing of at least one of the storage systems as taught by **Honma** et al. This modification would have been obvious because one skilled in the art would have been motivated by the suggestions provided by **Honma** et al to protect company secure resources from being accessed or shared by others (pages 9-10, paragraphs 0103-0106).

#### Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as the art discloses the use of sharing automated data storage system. Many of the claimed features, i.e. cataloging, backup, control access, etc. are disclosed in this reference.

  US Patents: 5,287,459 Gniewek; 5,537,585 Blickenstaff et al; 5,121,483 Monahan et al.
- 4.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CV

Carl Colin

Patent Examiner

August 2, 2005

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100

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